BEF ORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of	)	
	)	
PUBLIC UTILITIES COMMISSION	)	DOCKET NO. 2008-0273
	)	
Instituting a Proceeding to Investigate the Implementation of Feed-in Tariffs.	)	
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PUBLIC UTILITIES COMMISSION

HAWAII SOLAR ENERGY ASSOCIATION'S
PUC INFORMATION REQUEST #2 ON APPENDIX A AND C

AND

CERTIFICATE OF SERVICE

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HAWAII SOLAR ENERGY ASSOCIATION'S
PUC INFORMATION REQUEST #2 ON APPENDIX A AND C

TO THE HONORABLE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII:

HAWAII SOLAR ENERGY ASSOCIATION ("HSEA") hereby submits to the Hawaii Public Utilities Commission (the "Commission") its preliminary comments on Appendix A and C.

Appendix A: Cost Data Forms

(Responses are due in 45 days.)

HSEA Response:
Hawaii Solar Energy Association ("HSEA") makes several points related to pricing:

1. As an association of solar equipment distributors, solar integrators, and financiers dedicated to accelerating the deployment of solar energy in Hawaii, because of anti-trust issues, it members cannot share pricing information.

2. There is a paucity of large projects and we question the value of cost data from these "early adopter" projects in setting fair PBFiT rates.

3. In determining its pricing structure the Commission must explicitly take account of the important role of net energy metering (NEM) and how it would interact with a feed-in tariff. HSEA strongly believes that NEM should be available to all customers installing systems designed to offset their total annual load, irrespective of the feed-in tariff rate. That is, compensation for all energy generated up to the customer's total annual usage should be available to customer at either the feed-in tariff or NEM rate. The choice of rate should be made by the customer. Such a system would serve both the public interest and ratepayer interest. For production in excess of annual usage and/or for systems that are designed to produce energy for sale at a profit, feed-in tariff is the appropriate form of compensation.

In lieu of actual cost data, HSEA supports the approach outlined below to establish initial PBFiT rates that are fair and designed to help move the market. At the present time and for the following rationale, HSEA proposes that PBFiTs be established for ONLY photovoltaics because:

1. The technology is has high installed costs and is therefore suitable for PBFiTs;
2. The technology is well-known to HECO, who has worked closely with industry on interconnection requirements;
3. Developers are familiar with current permitting processes; and
4. PBFiTs, as part of universal or standard contracts, will help facilitate a more rapid financing, installation and operation of these technologies in Hawaii.

Given the above, HSEA offers the following Table of proposed PBFIT rates for PV by island and size. We believe the proposed rates are fair and will help to move the market.

Table 1. a. Feed-In Tariff Proposal for PV (values in cents per kWh)

Island	≤ 500 kW	500 kW – 5 MW	6 to 10 MW	11 to 20 MW
Oahu	33 to 37	28 to 32	25 to 29	22 to 26
Maui	35 to 39	30 to 34	27 to 31	25 to 29
Molokai	38 to 42	33 to 37		
Lanai	40 to 44	35 to 39		
Hawaii	37 to 41	32 to 36	29 to 33	27 to 31

Assumptions:

1. Includes permitting and interconnection costs based on independent interconnection studies contracted by HECO.
2. Includes total installed cost with profits and warranty costs.
3. O&M is covered under a separate contract with the customer.
4. HSEA is recommending that the Commission consider exempting solar systems up to 20 MWs from competitive bidding
5. Systems for FiTs assume that the customer is a net power producer. The quantity of systems on a given island would be limited on only by distribution circuit limits, initially at 30% of the line capacity and increased over time based on a collaborative study including HECO, NREL and industry.

Appendix C: Questions

The Commission should direct the parties to respond to the following questions. Please provide detailed responses including supporting calculations and assumptions, underlying reasoning, and supportive citations. Responses to the threshold legal issues are due within 30 days. Responses to all other questions are due in 45 days.

Threshold Issues (Legal) Questions 1-3

1. HSEA does not take a position on this issue but nonetheless recognizes its importance and may later in these proceedings provide additional information as necessary and appropriate.

2. HSEA does not take a position on this issue but nonetheless recognizes its importance and may later in these proceedings provide additional information as necessary and appropriate.

3. HSEA does not take a position on this issue but nonetheless recognizes its importance and may later in these proceedings provide additional information as necessary and appropriate.

Other Threshold Issues

4. Feed-in tariffs, if approved by the Commission, would join an array of legislative and regulatory initiatives to boost production of renewables in Hawaii. Those initiatives include PURPA, the renewable portfolio standard, net metering and various distributed generation actions. Are there overlaps, redundancies, gaps among these multiple initiatives? What is the independent purpose of each of these, in relation to the others?

Response: Please note that because it is unclear from the question as to what is meant by "various distributed generation actions", this response does not address these initiatives.

PURPA, the renewable portfolio standard, net metering, and feed-in tariffs are distinct and independent initiatives which were designed and implemented to encourage the development of renewable energy and/or the efficient use of fossil fuels. These initiatives should be able to co-exist and compliment each other. Thus, HSEA would strongly object to any proposal that would attempt to eliminate and/or replace PURPA, the renewable portfolio standard, or net metering with feed-in tariffs.

Process and General Feed-in Tariff Issues

5. Please explain the criticality of completing the "best-design" phase of this investigation by March 2009 and having project-based FiTs in place by July 2009 as called for in the Agreement.

Response: HSEA recognizes a substantial public and ratepayer interest in developing sound, effective, and appropriate policy through this proceeding. Nonetheless, HSEA's members, and installers and integrators of solar systems face an unintended consequence of the feed-in-tariff development process that does not have a similar impact on some other parties to this proceeding. This results from the financial uncertainty that a feed-in-tariff 'under development' has on the ability to provide prospective customers with pro forma financials for solar investments. That is, the customers of HSEA's member companies are unable to calculate the rate of return on their investments in solar systems without the information that will be the product of this proceeding. This has essentially put on hold the market for commercial solar in 2009 in Hawaii. HSEA therefore supports the aggressive schedule put forth for this proceeding.

6. Please explain why project-based FiTs are superior to other methods that require a utility to purchase renewable electricity.

Response: Since this investigative docket has only recently begun and there are many documents and information yet to be submitted in this proceeding in accordance with the Commission ordered procedural schedule, HSEA has yet to form an opinion as to how project based FiTs compare to other methods that require a utility to purchase renewable electricity. Thus, HSEA reserves its right to address this question at a later date in this proceeding.

However, it is HSEA's understanding to date, that if FiTs are implemented correctly, it offers the developer more certainty in regards to price, thus the developer does not have to spend time negotiating with the public utility over the public utility's avoided costs. This certainty in turn would lead to reducing the time it takes to obtain a Power Purchase Agreement ("PPA") with the public utility and also reduce the cost of financing the renewable project. Also, since the Commission has already approved the feed-in tariff with input from the Consumer Advocate, it should also reduce the time to get the PPA approved by the Commission.

7. Please quantify the costs over avoided costs of an open-ended PBFiT program assuming the utility meets the RPS goals set forth in the Agreement.

Response: HSEA does not understand what is being asked for in this question. Perhaps, HSEA will be in a better position to respond once it has an opportunity to review and analyze the many documents and information yet to be submitted in this proceeding in accordance with the Commission ordered procedural schedule. Thus, HSEA reserves its right to address this question at a later date in this proceeding.

However, HSEA will note that if the question being asked is whether it is a good idea to design a PBFiT program with payments over the conventional avoided cost of the utility, then the answer is "yes." In fact, that is why FiTs came into being. Specifically, where retail rates and wholesale rates are not sufficiently high to encourage retail and wholesale renewable applications

respectively, FiTs create a set of market prices where goals for increase use of renewables can be met.

8. Please quantify the benefits of lowering oil imports, increasing energy security, and increasing both jobs and tax base for the state mentioned in the Agreement.

Response: HSEA as an alliance of solar manufacturers, integrators, and financiers dedicated to accelerating the promise of PV energy in Hawaii and nationwide is currently not in a position to quantify the benefits of lowering oil imports, increasing energy security and increasing both jobs and tax base for the state. Perhaps, HSEA will be in a better position to respond once it has an opportunity to review and analyze the many documents and information yet to be submitted in this proceeding in accordance with the Commission ordered procedural schedule. Thus, HSEA reserves its right to address this question at a later date in this proceeding.

9. Is the goal to encourage as much use of renewable resources as possible as soon as possible, or is it to encourage the orderly introduction of renewable resources based upon cost effectiveness?

Response: Given the economic and strategic concerns associated with an oil-based energy regime, Hawaii would be best served by a system that encourages renewable penetration as quickly as possible, while preserving customer choice.

10. How long a period should exist between mandatory Commission reviews of the PBFiTs?

Response: A period of 2-3 years is a reasonable initial estimate for this time. However, it is possible that the events will reveal the need for this interval to be shorter for one or more technologies and it would be useful to embed this flexibility in the overall tariff structure. Thus, HSEA reserves its right to address this question at a later date in this proceeding.

PBFiT General Design Issues

11. Do each of the technologies listed as a renewable resource in the RPS legislation require a PBFiT?

Response: Since this investigative docket has only recently begun and there are many documents and information yet to be submitted in this proceeding in accordance with the Commission ordered procedural schedule, HSEA has yet to form an opinion as whether each of the technologies listed as a renewable resource in the RPS legislation require a PBFiT. HSEA does believe, however, that there is a substantial public and ratepayer benefit in accelerating the adoption of FiT for PV as soon as possible. Additionally, HSEA reserves its right to address this question at a later date in this proceeding.

12. Should PBFiTs for certain technologies be established now while others are deferred?

Response: Yes. HSEA believes that PBFiTs should be established at different paces. As noted elsewhere in this response, HSEA's member companies and their clients are already being stymied by the uncertainty regarding the ultimate structure of the PBFiT as it applies to solar projects. All else equal, this argues for prioritizing solar and other technologies that are experiencing this marketplace disruption. HSEA is not aware of which, if any, other technologies are already experiencing this challenge. If PBFiTs are implemented, technologies that do not have a proven track record in Hawaii should not be implemented.

13. Should the Commission cap purchases under PBFiTs? If yes, what is the maximum amount? Should individual caps be set for each technology? What period should the cap cover? What is the measurement for the cap (e.g., dollars, percent of sales, kW, or kWh)?

Response: No caps should be implemented unless it would lead to the curtailment of existing IPP generators with contracts to provide power to the utility or lead to "real" system generation issues.

There will be "technical" limits based on the results of interconnection requirements studies ("IRS") for both wholesale and retail applications, and reasonable distribution circuit feeder penetration limits in retail applications. There does need to be discussion and agreement on the scope, cost and timeline for the IRSs.

14. What limitations exist for integrating renewable resources onto the grid? Should these limits affect the PBFIT design or caps, or are they just another cost that developers must consider?

Response: The HECO Companies currently have limitations as to how much energy can be provided on each circuit. These limitations have negatively affected the deployment of PV in Hawaii. In tandem with the PBFiT implementation process it would be helpful to reduce existing limitations regarding interconnection/integration to the grid to the extent that is reasonably possible. Remaining limitations should be periodically evaluated to determine the extent to which they can be father reduced.

Specific Tariff Design Issues

15. How long should the Commission set for the PBFiT's term of obligation? Should it be different for different technologies? Is there a common basis (e.g., a conservative estimate of expected useful life) for establishing the term of obligation? On what basis should a utility pay for electricity after the term expires?

Response: HSEA is comfortable with the HECO/CA proposal of a 20 year term for PV.

16. Should PBFiTs require the utility to purchase the project's gross or net output at the PBFIT price?

Response: At this point HSEA believes that determining a PBFiT's applicability to gross or net production would best be left to the customer/generator because the optimal outcome will be a function of the size of non-uniform factors such as technology, demand, and time of use, as they interact with the PBFiT itself. Since this investigative docket has only recently begun and there are many documents and information yet to be submitted in this proceeding in accordance with the Commission ordered procedural schedule, HSEA reserves its right to address this question at a later date in this proceeding.

17. How should the utility determine the price paid for renewable energy not covered by a PBFiT (e.g., purchases above the cap or beyond the term of obligation)?

Response: This question cannot be answered without knowing more about the PBFiT regime.

18. What inflation adjustment, if any, should the PBFiT include, using what base and indexes?

Response: HSEA believes that this question is not answerable as stated because appropriate inflation varies depending on the design of the tariff. If the tariff rate was intended to be relatively higher in earlier periods and low in later periods it may be possible to have a modest indexing factor. If, in contrast, the tariff begins lower the indexing will need to be more aggressive in order to produce returns sufficient to entice investors. As a general point, HSEA believes that indexing should be considered simultaneously with payment levels and that only in this linked context can the proper answer to the question be determined.

19. What milestones (e.g., commercial operations) should the Commission set to determine eligibility for the PBFiT? Are Hawaii's RPS statute requirements an eligibility requirement? Should utility affiliates be eligible to receive the PBFiT price?

Response: RPS requirements should be the starting point of PBFiT eligibility. To avoid conflict of interest, utility affiliates should not be eligible for PBFiT.

20. Please comment on the need for stepped tariffs based upon location, size, fuel mix, and output.

Response: Since this investigative docket has only recently begun and there are many documents and information yet to be submitted in this proceeding in accordance with the Commission ordered procedural schedule, HSEA has yet to form an opinion on the need for

stepped tariffs based upon location, size, fuel mix, and output. Thus, HSEA reserves its right to address this question at a later date in this proceeding.

21. Under what circumstances should the PBFiT price be time-differentiated?

Response: Since this investigative docket has only recently begun and there are many documents and information yet to be submitted in this proceeding in accordance with the Commission ordered procedural schedule, HSEA has yet to form an opinion on whether the PBFiT price should be time-differentiated. Thus, HSEA reserves its right to address this question at a later date in this proceeding.

22. How highly leveraged (i.e., bearing how much debt compared to equity) are these projects?

Response: HSEA is unable to answer this question at this time because it does not know how the question is defining "these projects". The extent, if any, to which PBFiT prices should be time differentiated should vary by factors such as technology and customer type.

23.Does a PBFiT create a financing environment through a reliable revenue stream from the ratepayer to the investor, allowing for greater leverage and thus lower cost financing than would be available under an avoided-cost tariff?

Response: The answer to this question depends on the rate of the PBFiT.

24.If the PBFiTs are to encourage early development of resources, does the reasonable return need to be set higher for these early tariffs? Are there reasons other than encouraging early development to set the profit margin higher, such as risks associated with early implementation? Is this true across all project classes?

Response: Since this investigative docket has only recently begun and there are many documents and information yet to be submitted in this proceeding in accordance with the Commission ordered procedural schedule, HSEA has yet to form an opinion on the inquiries posed in this question. Thus, HSEA reserves its right to address this question at a later date in this proceeding.

25.Does the current "credit crunch" affect the financing costs, including expected profits by equity investors?

Response: The credit crunch and related economic problems substantially affect financing costs. This is due at least to (a) higher borrowing costs and (b) the higher investor returns required to place tax equity (for projects for which there are federal and/or state tax incentives) due to the reduced appetite for such incentives in a context of lower overall profitability and commensurately reduced demand for tax incentives.

Related Issues

26.Please provide a quantitative analysis demonstrating the public interest aspect of the concept that 10% of the utility's purchases under the feed-in tariff PPA should be included in the utility's rate base through 2015. In addition to the overall prudence of the rate base recommendation, please address the 10% and 2015 date included in the Agreement.

Response: Since this investigative docket has only recently begun and there are many documents and information yet to be submitted in this proceeding in accordance with the Commission ordered procedural schedule, HSEA is currently not in a position to respond to this question. Thus, HSEA reserves its right to address this question at a later date in this proceeding.

27.What is the appropriate rate of return for the PBFiT portion of rate base that consists of a mandated purchase with guaranteed recovery and no capital outlay?

Response: Since this investigative docket has only recently begun and there are many documents and information yet to be submitted in this proceeding in accordance with the Commission ordered procedural schedule, HSEA is currently not in a position to respond to this question. Thus, HSEA reserves its right to address this question at a later date in this proceeding.

28.Are there preferable utility incentives, other than putting PBFiT revenues into the rate base, to encourage the development of renewable resources?

Response: Since this investigative docket has only recently begun and there are many documents and information yet to be submitted in this proceeding in accordance with the Commission ordered procedural schedule, HSEA is currently not in a position to respond to this question. Thus, HSEA reserves its right to address this question at a later date in this proceeding.

29.Should the PBFiT require developers to assign credits (e.g., investment tax credits, renewable energy credits, and carbon credits) earned from a project to the purchasing utility as a condition of receiving payments under the PBFiT? If not, how should these credits be included in the estimation of a typical project's cost?

Response: PBFiT should not require developers to assign credits to the utility as a condition of purchase. These credits are the property of the developer and as such should be under the complete control of the developer, including the ability of the utility to apply them for various regulatorially and/or statutorially mandated purposes.

Respectfully submitted.

DATED: Honolulu, Hawaii, January 26, 2009.

MARK DUDA
PRESIDENT, HSEA

CERTIFICATE OF SERVICE

The foregoing Comments to Scoping Paper was served on the date of filing by mail, postage prepaid, hand delivery, or electronically transmitted to each such Party.

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